Customer No.: 26021

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- (Currently Amended) A deposition system for depositing silica 1. particles onto a workpiece comprising:
 - a burner for depositing the particles onto the workpiece;
- (b) a lathe for holding the workpiece and for rotating and translating the workpiece relative to the burner; and
- a computer for controlling the translating and rotating of the workpiece relative to the burner;

wherein the lathe is for at times translating selectively translates the workpiece at a rate of greater than about 1.4 meters per minute.

- 2. (Original) The deposition system of claim 1, further comprising a casing enclosing the burner and the lathe, wherein the casing includes a plurality of vents.
- 3. (Currently Amended) The deposition system of claim 1, further comprising a casing enclosing the burner and the lathe, wherein the casing comprises Hastelov a nickel-chromium-molybdenum alloy.
- (Original) The deposition system of claim 1, further comprising two 4. end torches wherein one of the two end torches is adjustable with respect to a distance between the two end torches.

- 5. (Original) The deposition system of claim 1, wherein the workpiece is translated according to a motion profile.
- 6. (Original) The deposition system of claim 1 wherein the workpiece is translated at a speed of at least about seven meters per minute and an acceleration of at least about 250 millimeters per second per second.

7-26. (Canceled)

- 27. (Original) A deposition system for depositing silica particles onto a workpiece comprising:
 - (a) a lathe for holding the workpiece;
- (b) a burner for depositing the particles onto the workpiece and at least one motor for translating the burner relative to the workpiece; and
- (c) a computer for controlling the translating and rotating of the workpiece relative to the burner;

wherein the computer is configured to translate the burner relative to the workpiece at a rate at times greater than about 1.4 meters per minute.

28-51. (Canceled)